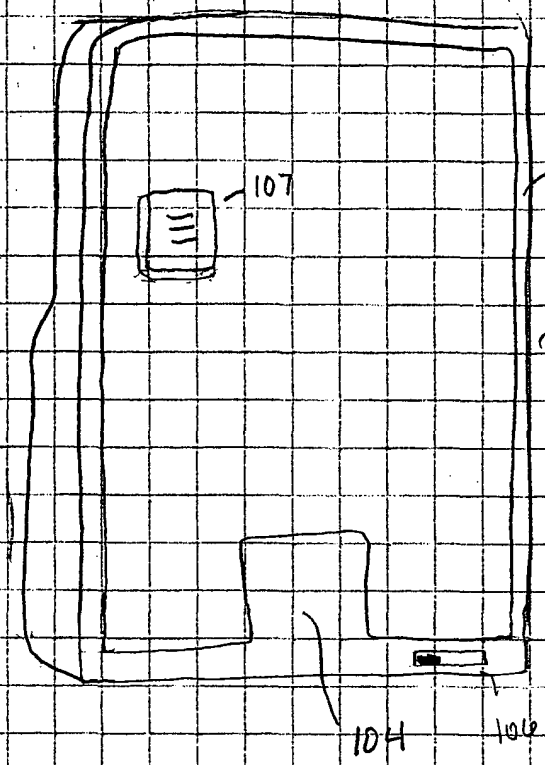

Fig 1

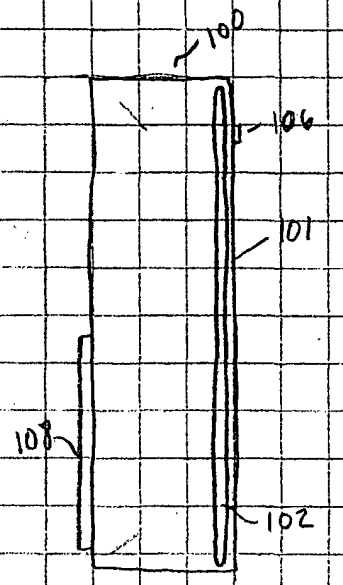

Fig 2

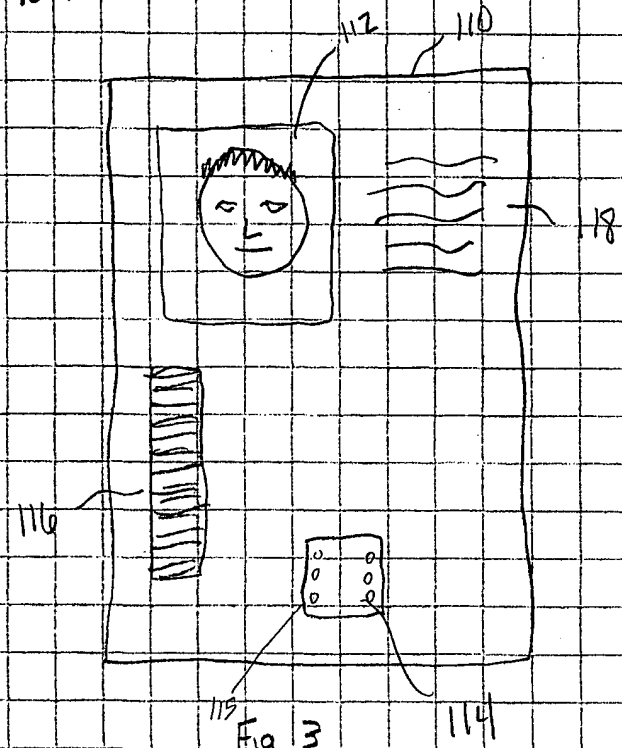

Fig 3

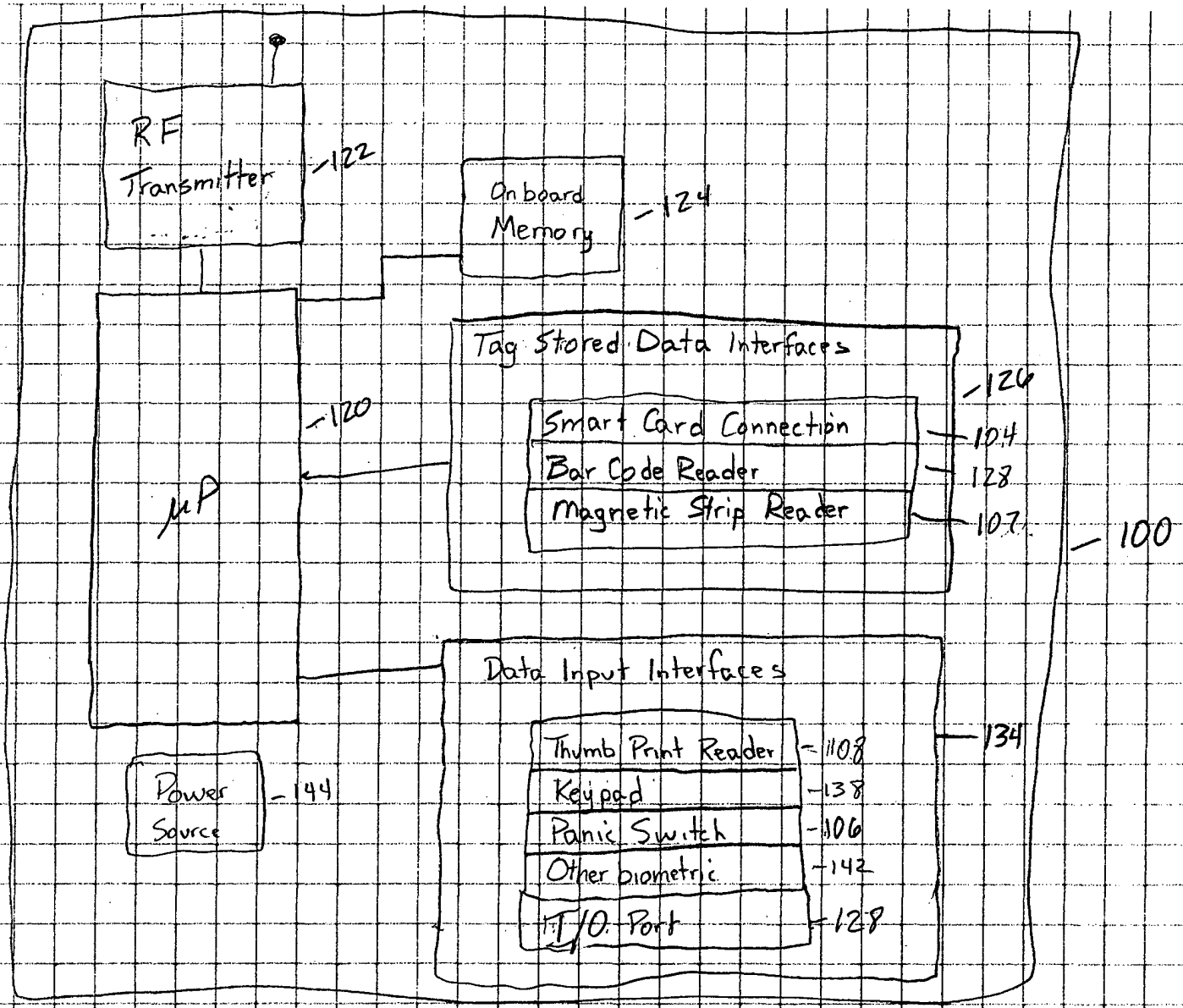
RF Transmitter
122
Onboard Memory
124
Tag Stored Data Interfaces
126
Smart Card Connection
104
Bar Code Reader
128
Magnetic Strip Reader
107
120
μP
100
Data Input Interfaces
134
Thumb Print Reader
108
Keypad
138
Panic Switch
106
Other biometric
142
I/O Port
128
Power Source
144

FIG. 4

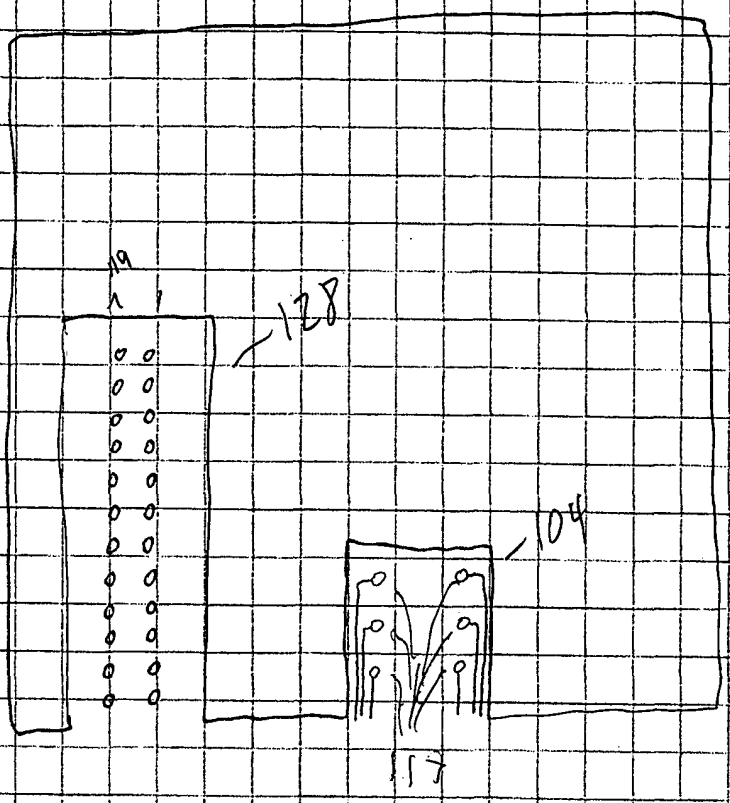
19
128
104
101
17

Fig 5

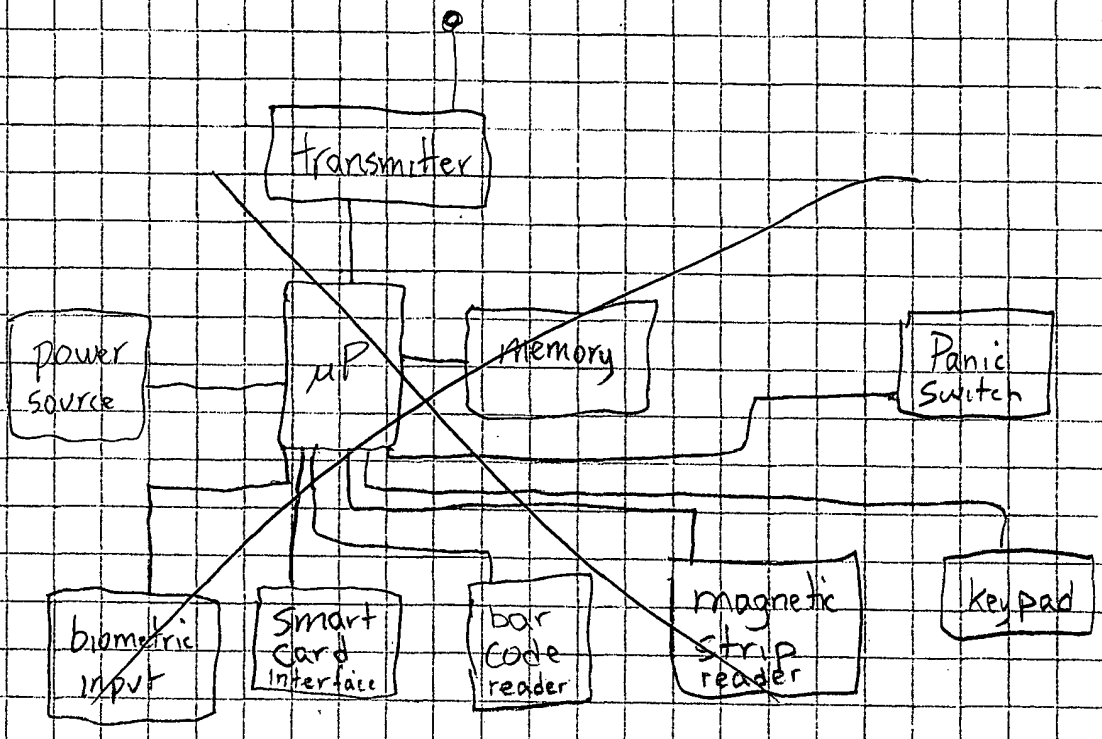
transmitter
power source
µP
memory
Panic Switch
biometric input
smart card interface
bar code reader
magnetic strip reader
keypad

Fig. 4

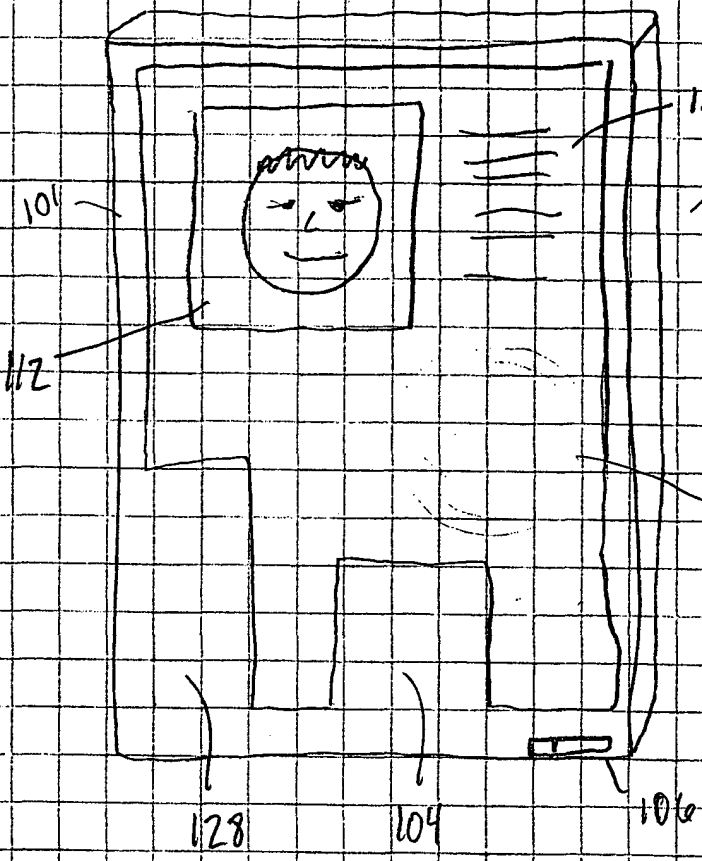

Fig 6

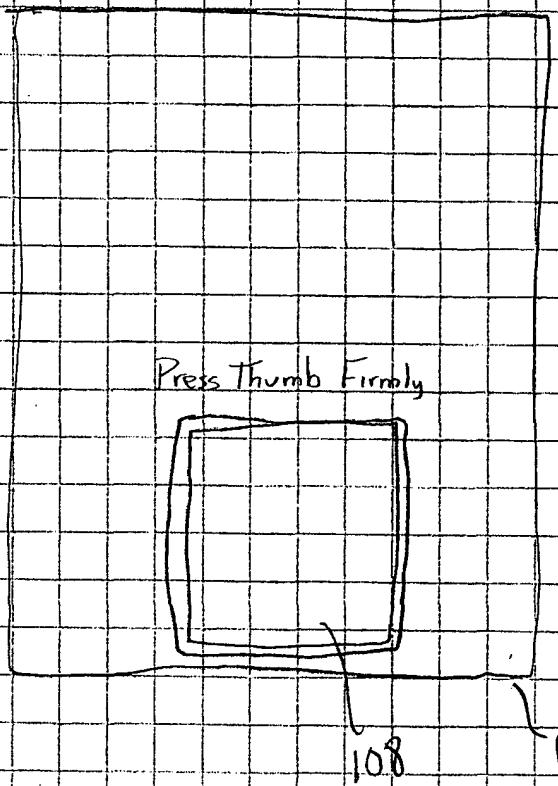

Fig 7

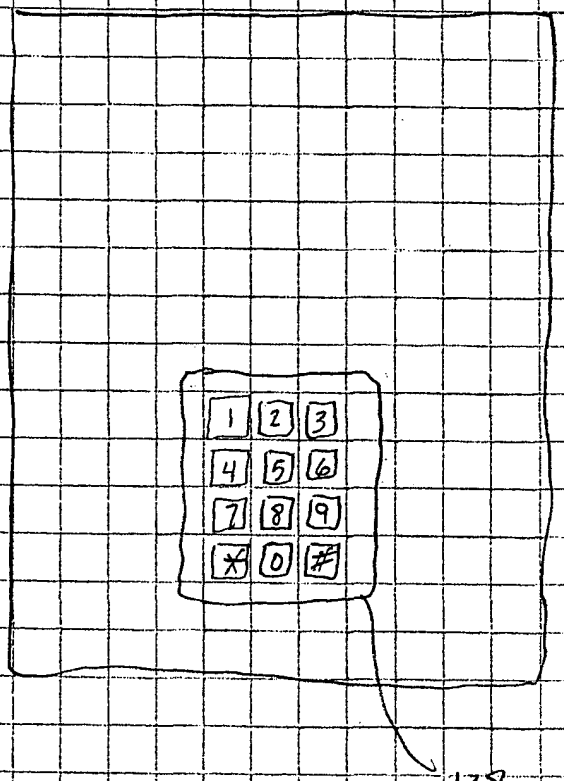

Fig. 8

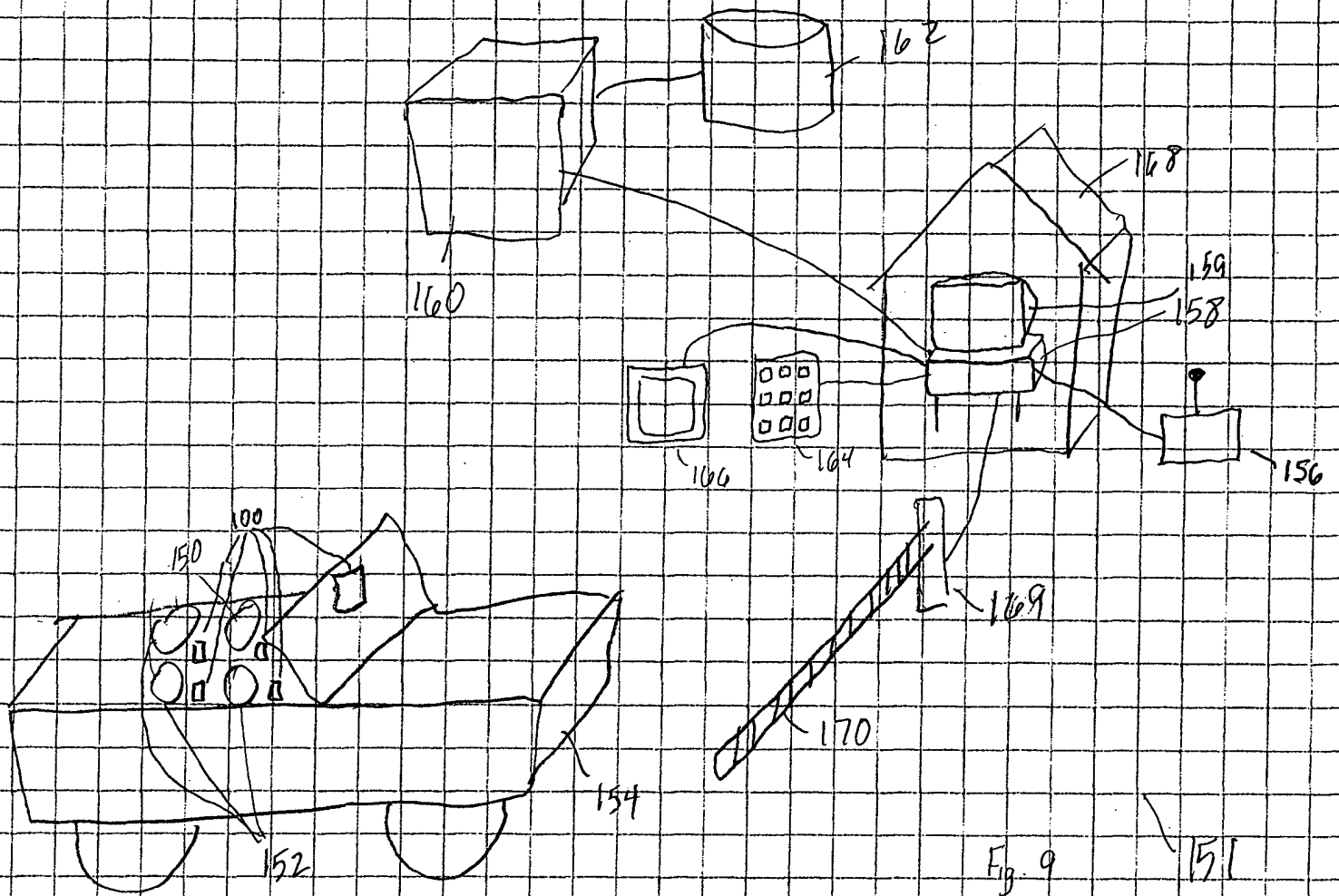

Fig. 9

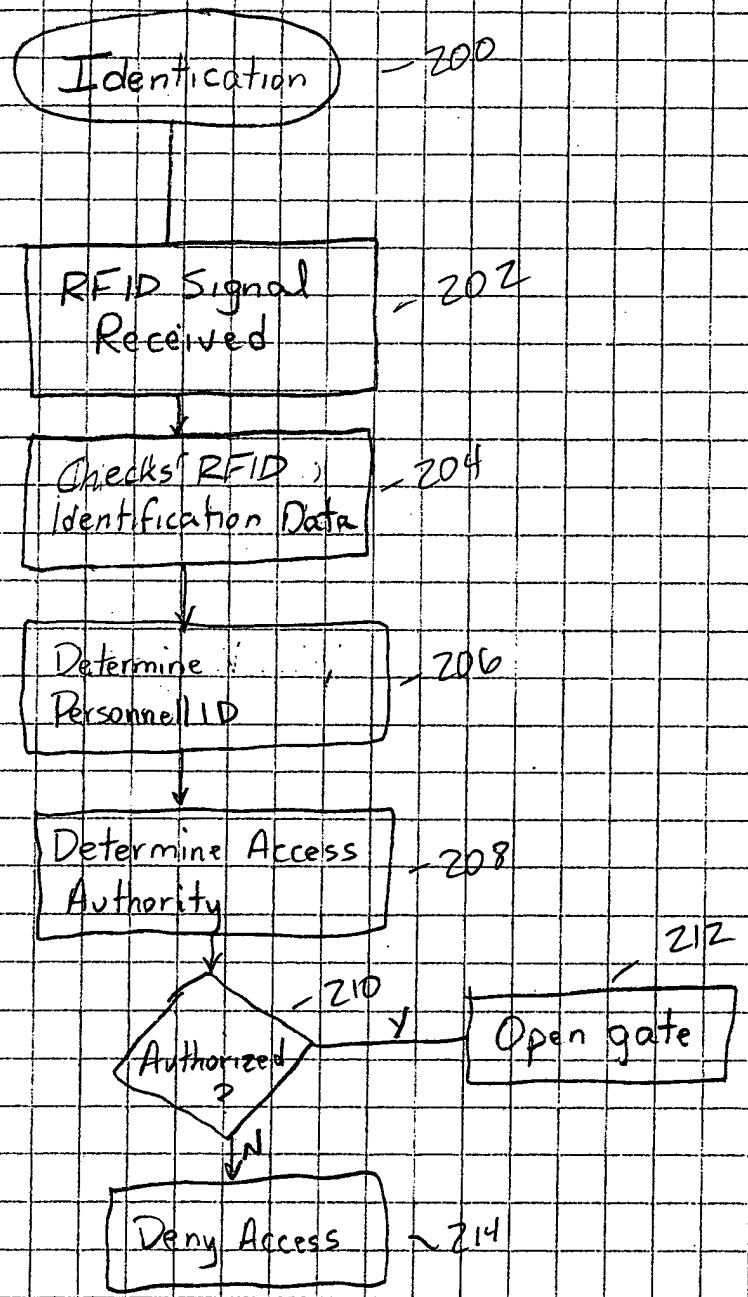
Identification
200
RFID Signal Received
202
Checks RFID Identification Data
204
Determine Personnel ID
206
Determine Access Authority
208
Authorized ?
210
Y
N
Open gate
212
Deny Access
214

Fig 10

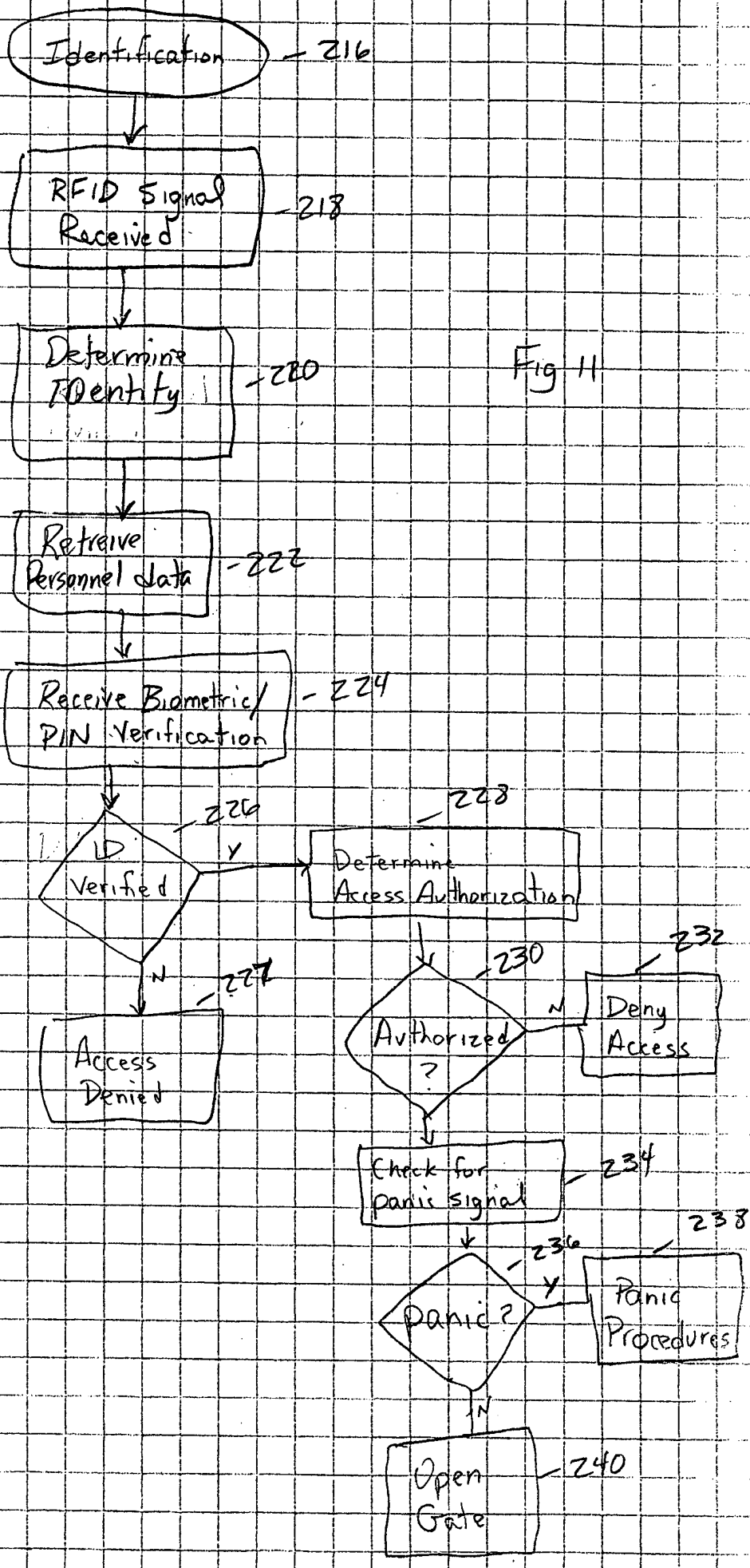
Identification
216
RFID Signal Received
218
Determine Identity
220
Retreive Personnel data
222
Receive Biometric/ PIN Verification
224
ID Verified
226
Y
N
227
Access Denied
228
Determine Access Authorization
230
Authorized ?
N
232
Deny Ackess
Check for panic signal
234
panic?
236
Y
238
Panic Procedures
N
Open Gate
240

Fig 11

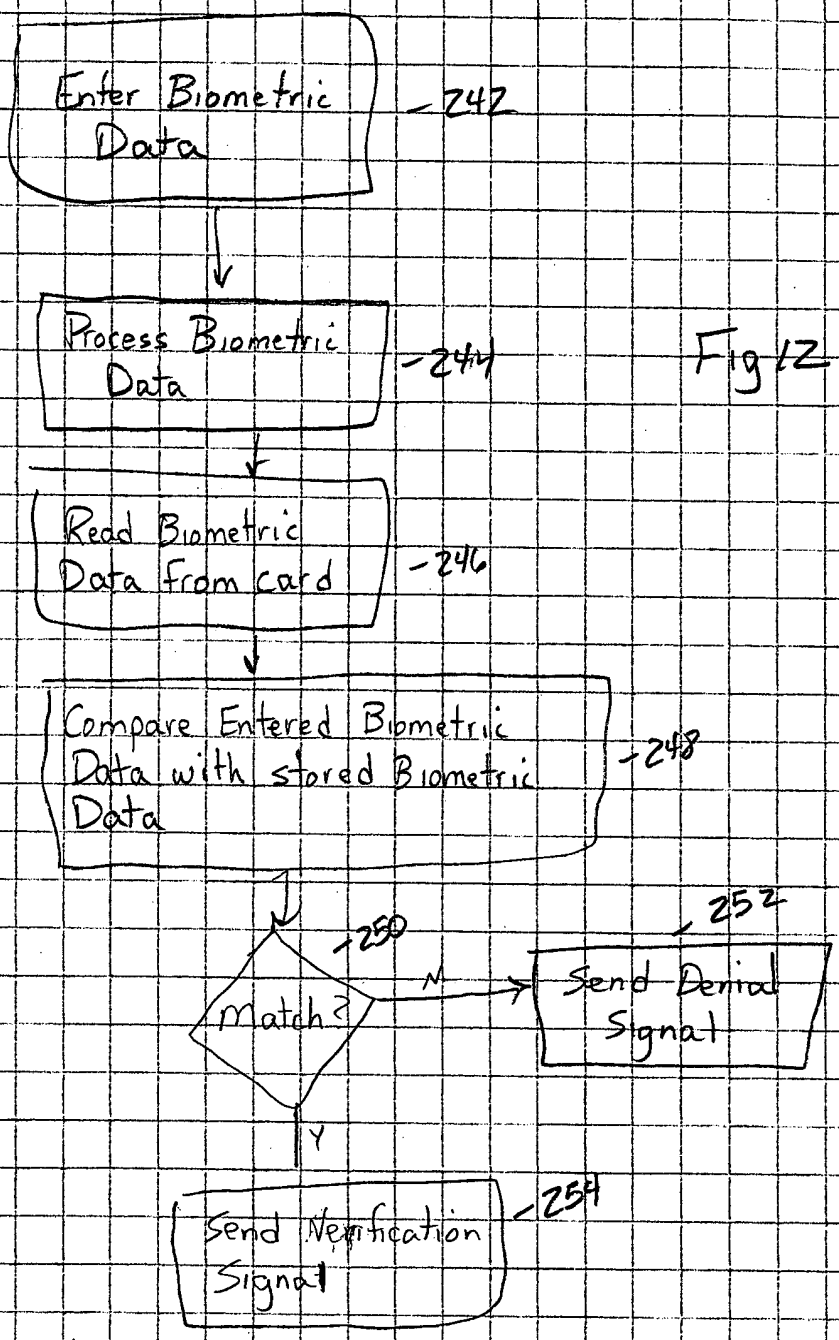
Enter Biometric Data
242
Process Biometric Data
244
Read Biometric Data from card
246
Compare Entered Biometric Data with stored Biometric Data
248
Match?
250
N
Send Denial Signal
252
Y
Send Verification Signal
254

Fig 12

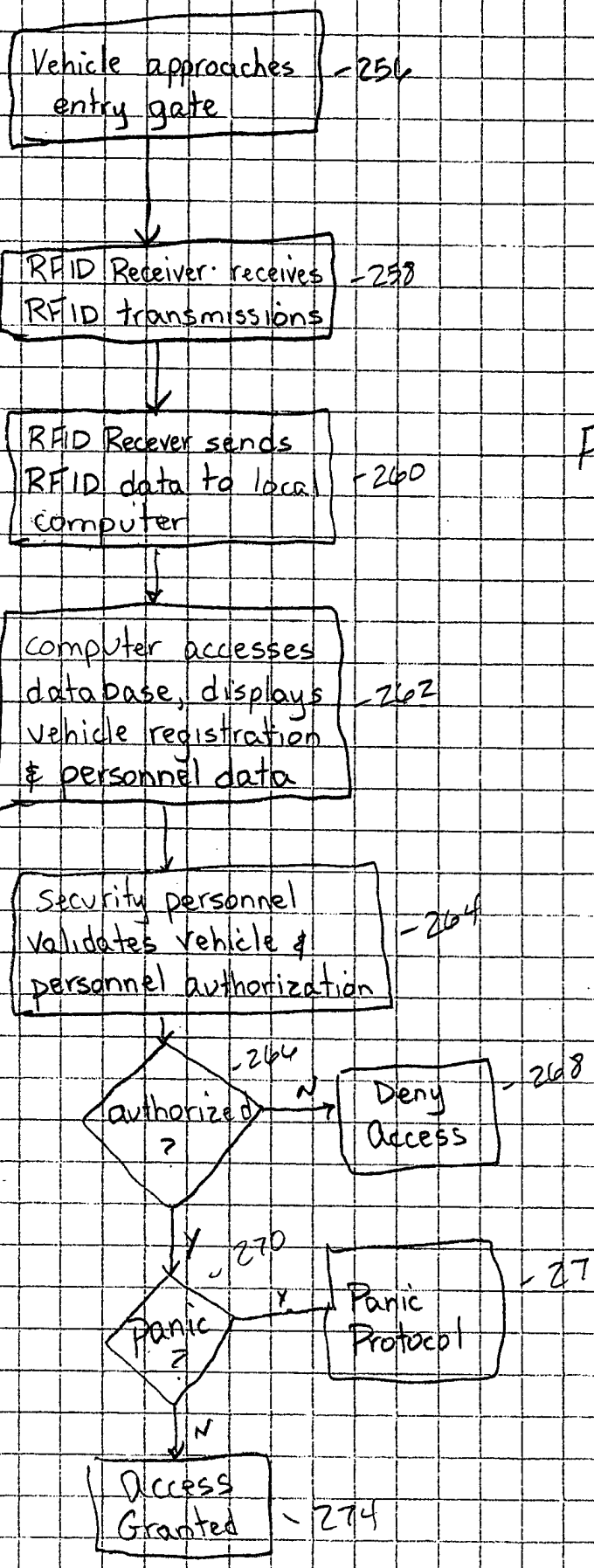
Vehicle approaches entry gate
256
RFID Receiver receives RFID transmissions
258
RFID Recever sends RFID data to local computer
260
computer accesses database, displays vehicle registration & personnel data
262
Security personnel validates vehicle & personnel authorization
264
authorized ?
N
Deny Access
268
Y
270
Panic ?
Y
Panic Protocol
272
N
Access Granted
274

Fig 13

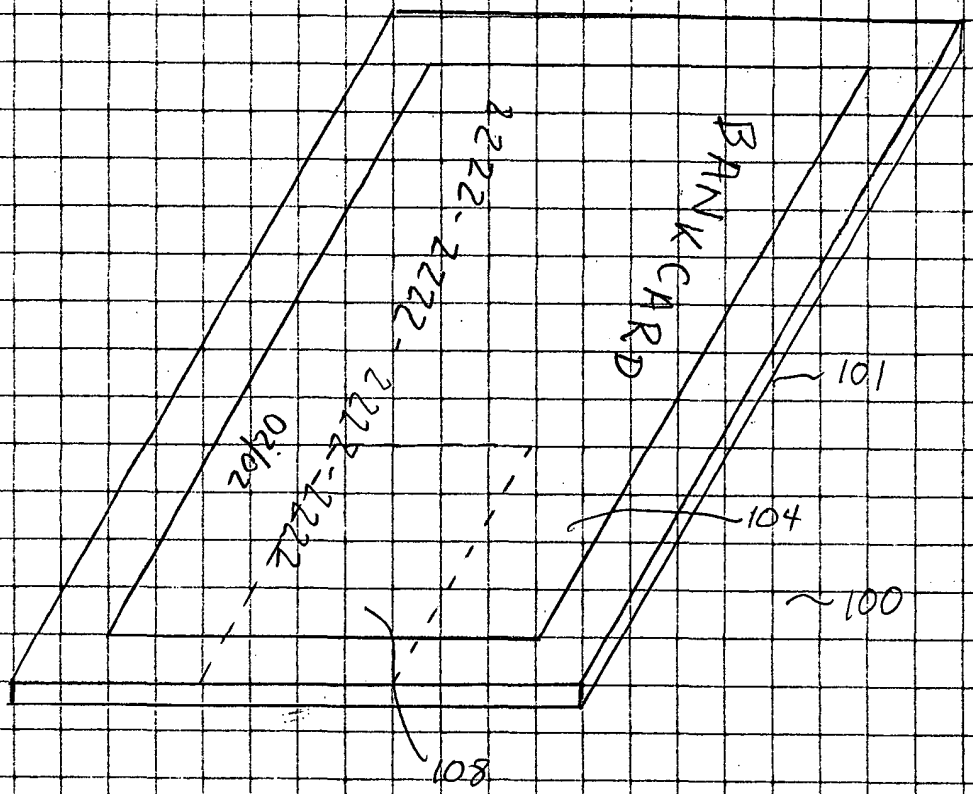

Fig. 14

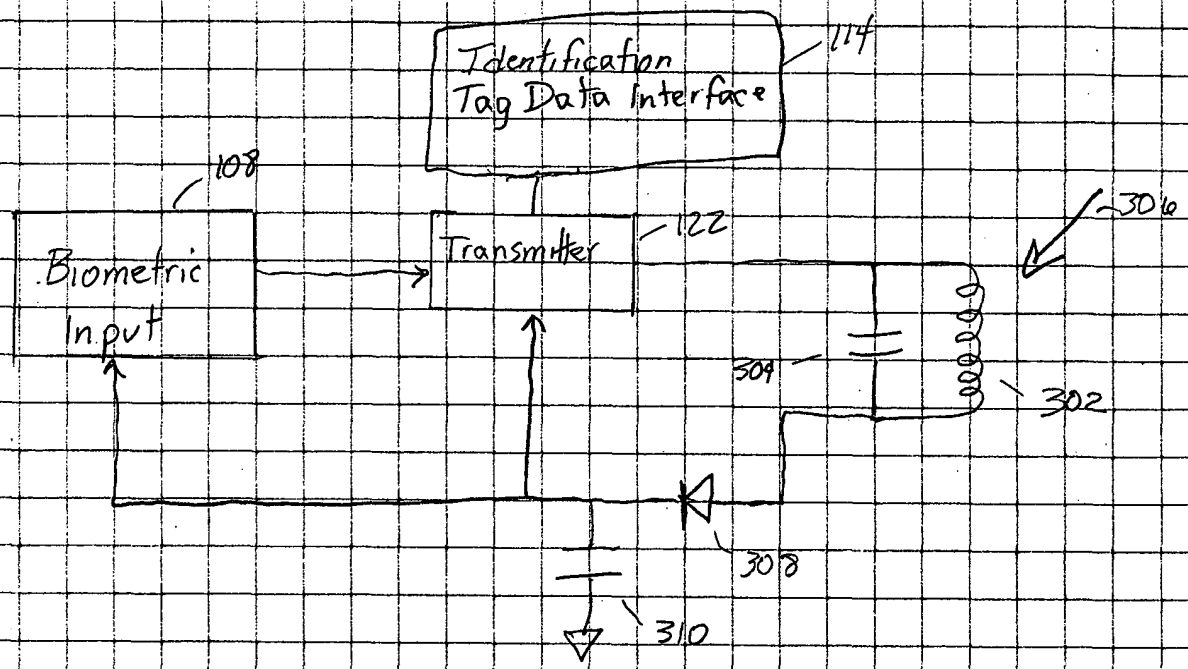
Identification
Tag Data Interface
114
108
Biometric
Input
Transmitter
122
306
304
302
308
310

Fig 15